

- a²
- c. a pump connected between said reservoir and said conduit which selectively dispenses liquid from said reservoir to said conduit; and
 - d. a spray tip provided within said needle holder assembly, said spray tip being positioned to connect said conduit exit opening directly to the interior of said needle cannula such that disinfectant spray is distributed inside the needle cannula.
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9. (amended) A method of disinfecting a hypodermic needle of an implanter apparatus which implants pellet(s) in an animal through a cannula of the hypodermic needle, which needle is connected to the implanter apparatus via a needle holder assembly, said method including the steps of:

- a³
- a. attaching a disinfectant reservoir to the implanter;
 - b. forming a conduit in said implanter, said conduit having an inlet opening connectable to said reservoir and an exit opening which connects with the interior of said needle cannula;
 - c. connecting a pump between said reservoir and said conduit inlet opening which selectively dispenses liquid from said reservoir to said conduit; and
 - d. operating said pump independently of the implanting of pellet(s) by the implanter apparatus to dispense a

a³

quantity of disinfectant from said reservoir to said needle cannula via said conduit.

[Please add the following claims:

12. In an implanter apparatus for implanting pellet(s) in an animal through a cannula of a hypodermic needle which is connected to the implanter apparatus via a needle holder assembly, the implanter apparatus including a housing with a grip portion, said implanter injecting a dose of said pellets through said needle cannula via an impeller in response to squeezing of said grip portion, the improvement comprising:

- a⁴
- a. a liquid reservoir;
 - b. a conduit having an inlet opening connectable to said reservoir and an exit opening which connects with an interior of the needle cannula;
 - c. means for selectively dispensing liquid from said reservoir to said conduit;
 - d. a pellet magazine having a plurality of pellet doses packaged therein, said magazine extending through said grip to enable said pellet doses to be successively aligned between said impeller and said needle;

- e. a magazine drum attached to a bottom of said grip portion, said magazine drum holding an extension of said pellet magazine in a spiral therein; and
 - f. said reservoir is positioned in said magazine drum within said spiral.
13. An implanter apparatus as in claim 12, said means for dispensing comprising:
- a. a pump connected between said reservoir and said conduit.
14. An implanter apparatus as in claim 12, the improvement further comprising:
- a. a spray tip provided within said needle holder assembly, said spray tip being positioned to connect said conduit exit end to said cannula interior.
15. An implanter apparatus as in claim 14, wherein said spray tip includes:
- a. an internal bore sized and positioned to mate with said cannula interior;
 - b. a concentric channel which is positioned to connect to said conduit exit opening; and

- c. one or more conveying channels connecting said concentric channel with said internal bore.

16. A method of disinfecting a hypodermic needle of an implanter apparatus which implants pellet(s) in an animal through a cannula of the hypodermic needle, which needle is connected to the implanter apparatus via a needle holder assembly, said implanter including a housing with a grip portion and a trigger assembly, said implanter injecting a stack of said pellets through said needle cannula via an impeller in response to squeezing of said trigger assembly and including a pellet magazine having a plurality of pellet doses packaged therein, said magazine extending through said grip to enable said pellet stacks to be successively aligned between said impeller and said needle and a magazine drum attached to a bottom of said grip portion, said magazine drum holding an extension of said pellet magazine in a spiral configuration therein, said method including the steps of:

- a. attaching a disinfectant reservoir to the implanter by positioning said reservoir in the magazine drum within said spiral;
- b. forming a conduit in said implanter, said conduit having an inlet opening connectable to said reservoir

and an exit opening which connects with the interior of said needle cannula;

- c. connecting a pump between said reservoir and said conduit inlet opening which selectively dispenses liquid from said reservoir to said conduit; and
- d. operating said pump to dispense a quantity of disinfectant from said reservoir to said needle cannula via said conduit.

17. A method as in claim 16, and further comprising the step of:

- a. providing a spray tip within said needle holder assembly, said spray tip being positioned to connect said conduit exit opening to the interior of said needle cannula.

18. A method as in claim 16, wherein said pump operating step comprises:

- a. operating said pump independently of the operation of said trigger assembly.

REMARKS

Applicants have received the examiner's action mailed November 11, 1997, and note with appreciation the indication that claims 5, 8 and 11 contain allowable subject matter.